

In the Claims

Please cancel claim 36.

Please amend claim 1, 4, and 22 as follows:

1. (Amended)

A method of increasing or inducing cold or freezing tolerance in rosacea species plant or gramineae species plant, which comprises the following steps:

- a) acclimating said plant to a temperature not lower than the coldest temperature that said plant is capable of withstanding, for a time sufficient to induce cold or freezing tolerance in said plant, and
- b) increasing the concentration of betaine or a derivative thereof in said plant to induce cold or freezing tolerance in said plant, the concentration being non-toxic wherein chlorosis does not occur in the plant;

whereby combined steps a) and b) increase or induce cold or freezing tolerance of said plant over and above the cold or freezing tolerance of the normal genotypic potential induced by each step alone.

4. (Amended)

A method as set forth in claim 1, wherein the plant comprises a gramineae species plant and the step of increasing the concentration of betaine or a derivative thereof includes overexpressing in the gramineae species plant one or more genes involved in the synthesis of betaine or a derivative thereof selected from the group consisting of betaine dehydrogenase and choline monooxygenase.

22. (Twice Amended)

A method as set forth in claim 1 or claim 20, wherein the increase in freezing tolerance is by at least about 6°C.